No.

200500080

THIE ONKHED SHAYIES OF AMIERIO

<u>TO ALL TO WHOM THESE PRESENTS SHALL COME:</u>

Nioneer Hi-Bred International, Inc.

There has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY CARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC **ENISHMENT OF** VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE **IO EXCLUDE O**THERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR GIT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ROSE OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT HEPLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.) PROV

SOYBEAN

'93M42'

In Testimonn Marcot, I have hereunto set my hand and caused the seal of the Mant Mariety Protection Office to be affixed at the City of Washington, D.C. this twenty-third day of June, in the year two thousand and five.

Plant Variety Protection Offi

Agricultural Marketing Scruix

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Peperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT (Instructions and information colle	VARIETY PROTEC ection burden statemen	TION CERTII t.on reverse)	FICATE	(7 U.S.C. 2421)	. Information is held confidentia	l until certifice	protection certificate is to be issued ate is issued (7 U.S.C. 2426).
NAME OF OWNER Pioneer Hi-Bred International, Inc					TEMPORARY DESIGNAT EXPERIMENTAL NAME XB34D04	TION OR	3. VARIETY NAME 93M42
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 7300 N. W. 62 rd Avenue P.O. Box 1004					5. TELEPHONE (include area code) 515-254-2638		FOR OFFICIAL USE ONLY
Johnston, IA 50131					6. FAX (include area cod	. 20	0 5 0 0 0 8 0
					515-253-2478		FILING DATE
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) 8. IF INCORPORA STATE OF INCO			CORPORATE FE OF INCOR	ED, GIVE RPORATION	9. DATE OF INCORPORATI May 6, 1926	1/18/2005	
10. NAME AND ADDRESS OF OWNER F	REPRESENTATIVE(S) TO SE	RVE IN THIS APPLI	CATION. (Fir	st person listed will	receive all papers)		FILING AND EXAMINATION
Daria Schmidt, Ph. D. 7300 N.W. 62 ¹⁴ Avenue P.O. Box 1004 Johnston ,IA 50131-1004	Steve Callistein, Exq 7100 N.W 62 nd Avenue P.O Box 1000 Johnston, IA 50131-1000						\$ 3,652.00
(••						DATE 1/18/2005
							certification fee:
							DATE 5/11/2005
11. TELEPHONE (Include area code) 515-254-2638	12. FAX (include area of 515-253-2478	code)	13. E-M/	AIL idt@pioneer.com		14. CRO	DP KIND (Common Name)
	010-200-2-170		Cana.scriiii			Suybean	
 CHECK APPROPRIATE BOX FOR EACH reverse) 	H ATTACHMENT SUBMITTE	D (Follow instruction	s on	19. DOES THE C			RIETY BE SOLD AS A CLASS OF riety Protection Act)
a. X Exhibit A. Origin and Breed	ing History of the Variety			☐ YES	3 (If "yes", answer items 20 and 21 below)		X NO (If "no," go to item 22)
 b. X Exhibit B. Statement of Dist c. X Exhibit C. Objective Description 					WNER SPECIFY THAT SEED (YES NO
d. X Exhibit D. Additional Descri	•				<u>—</u>	_	REGISTERED CERTIFIED
e.	Basis of the Owner's Ownersh	nip	-				
f. X Voucher Sample (2,500 viab verification that tissue culture v repository)	ele untreated seeds or, for tube will be depositied and maintain	er propagated varieti ned in an approved p	res. 1		WNER SPECIFY THAT THE CI TO NUMBER OF GENERATION		YES NO
g. X Filing and Examination Fee States" (Mail to the Plant Varie	(\$2,705), made payable to *Tr ty Protection Office)	reasurer of the Unite	d	IF YES, SPEC NUMBER 1, 2		TON	REGISTERED CERTIFIED
				(If additional e	xplanation is necessary, please	use the spac	ce indicated on the reverse.)
22. HAS THE VARIETY (INCLUDING ANY H FROM THIS VARIETY BEEN SOLD, DIS OTHER COUNTRIES?				PROPERTY F	ETY OR ANY COMPONENT OF RIGHT <i>(PLANT BREEDER'S RIC</i>	THE VARIE GHT OR PAT	TY PROTECTED BY INTELLECTUAL. ENT)?
☐ _{YES}	□ _{x NO}			∐ χγ		Li	NO
IF YES, YOU MUST PROVIDE THE DAT FOR EACH COUNTRY AND THE CIRCL	TE OF FIRST SALE, DISPOSI JMSTANCES. <i>(Please use sp</i>	TION, TRANSFER, pace indicated on rev	OR USE verse.)	REFERENCE	COUNTRY, DATE OF FILING C NUMBER. <i>(Please use space ir</i>	ndicated on re	E AND ASSIGNED everse.)
24. The owners declare that a viable sample for a tuber propagated variety a tissue cu	of basic seed of the variety will lture will be deposited in a pu	III be furnished with a	application an	nd will be replenish r the duration of the	ed upon request in accordance a certificate.	with such reg	gulations as may be applicable, or
The undersigned owner(s) is(are) the own and is entitled to protection under the pro							
Owner(s) is(are) informed that false repre	sentation herein can jeopardiz	ze protection and res	sult in penalti	es.			
signature of owner 1	hmidt			SIGNATURE OF C	DWNER		
NAME (Please print or type)				NAME (Please print or type)			
Daria H. Schmidt							
CAPACITY OR TITLE Director, Technology Integration and Association	i a	117/0	5	CAPACITY OR TIT	rle		DATE
ST-470 (04-01) designed by the Plant Variety Pr	otection Office with WordPerfo	ect 6.0a. Replaces	STD-470 (02-	-99) which is obsol	ete. (See reverse for inst	ructions and	information collection burden statement)

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be receifed in the PVPO (a) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filling fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

200500080

ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication:
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 21. See Section 83 of the Act for the Contents and Term of Plant Variety Protection.
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)
- U.S. Patent 4,940,835 issued to Shah et al. as per the Roundup Ready Gene in this variety

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center—East, Beltsville, MD 20705. Telephone: (301) 504-8089.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2606 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

ST-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces ST-470 (02-99) which is obsolete.

Exhibit A. Origin and Breeding History of the Variety

Soybean Variety 93M42

Variety 93M42 evolved from a cross made in the summer of 1997 in St. Joseph, IL with the following parentage:

93B65/92B74*

*92B74 is a commercial variety with the Roundup Ready (40-3-2) gene

Variety 93M42 is an F3-derived line which was advanced to the F3 generation by modified single-seed descent. The F3 progeny row of 93M42 was grown in a plant row in Iowa in 1999. Subsequently, 93M42 has undergone five years of extensive testing and purification and has been observed by the breeder to be uniform and stable for all plant traits from generation to generation, with no evidence of variants. On the basis of yield, Soybean cyst nematode resistance, and resistance to Roundup branded herbicides, variety 93M42 was assigned a commercial number.

The purification block was grown during the summer of 2002 in lowa and 40 sublines were harvested. An approximately half (1/2) acre increase was grown in Chile in the winter of 2002/03. Twenty-seven (27) acres of parent seedstock (foundation seed equivalent) were grown in 2003 and approximately 700 acres of seedstock and production seed were grown in the summer of 2004.

Exhibit B. Statement of Distinctness

Soybean Variety 93M42

Variety 93M42 is most similar to 93B67. Both varieties have white flowers, black hila, resistance to Races 3 of Soybean cyst nematode, and resistance to Roundup branded herbicides. However, 93M42 has light tawny pubescence and does not carry the Rps1c gene for resistance to *Phytophthora megasperma* whereas 93B67 has tawny pubescence and resistance to *Phytophthora megasperma* as governed by the Rps1c gene.

REPRODUCE LOCALLY. Include form number and date on all reproductions.

Form Approved - OMB No. 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data ources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

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U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705

EXHIBIT C (Soybean)

				AIPTION OF VAI		
NAME OF APPLICANT(S)	· · · · · / · ·					TAL USE ONLY
Pioneer Hi-Bred International ADDRESS (Street and No. or F					PVPP NIM	FRA AA OA
7300 N.W. (8T:1/2	(1/22/5)	and Zip Cod			- W	y v v v v v v
7200 62nd Avenue P.O Box 1004 Johnston, IA 50131-1004	4,500)				VARIETY N	IAME
		•			DESIGNAT	RY OR EXPERIMENTAL ON 4D04>
					(81:7	131/2005 per applica
		CAREFULLY: Place	the appropriate nu		e varietal character of this	
Place a zero in the first l quantitative	oox (e.g.	9 9 0	or 0 9	when number is eit	ther 99 or less or 9 or less r	espectively. Data for
plant characters chould	be based on a mi	nimum of 100 plants.	Comparative data	should be determined	from varieties entered in th	ne same trial. Roval
Horticulutral Society or						·
Please answer all question				_	•	
A. MORPHOL	OGY		11			· · · · · · · · · · · · · · · · · · ·
Seed Shape:						•
1 = Sp	herical L/T, and T/W	I notice < 1.2)		nerical - Flattened		
<u> </u>		ratios < 1.2)		atio > 1.2; L/T ra	HO < 1.2)	
	ongated atio . 1.2; T/V	V ratio < 1.2)		ngate - Flattened tio > 1.2;T/W rat	io > 1.2)	
Seed Coat Color:	•					•
1	1 = Yellow	2 = Green	3 = Brown	4 = Black	5 = Other	
Seed Coat Luster	••				(Please Specify	
4		a . cm. ·				
	= Dull	2 = Shiny				
Seed Size:					•	ı
15.1 g	rams/100 seed	ls				
Hilum Color:						
	1 = Buff	2 = Yellow	3 = Brown	4 = Gray	5 = Imperfect Blac	k
	6 = Black	7 = Other (Place)	ease Specify)		, -	

Cotyledon Color:

1

1 = Yellow

2 = Green

Seed Protein Peroxidase Activity:

1

1 = Low

2 = High

Hypocotyl Color:

1

1 = Green ('Evans' or 'Davis') 2 = Green with Bronze Bands below Cotyledons ('Woodworth' or 'Tracy')

3 = Light Purple below Cotyledons ('Beeson' or 'Pickett 71') 4 = Dark Purple extending to unifoliolate leaves

unifoliolate leaves ('Hodgson', 'Coker', or

Leaflet Shape:

3

1 = Lanceolate

2 = Oval

3 = Ovate

4 = Other (Please Specify)

Flower Color:

1

1 = White

2 = Purple

3 = White with a Purple Throat

Pod Color:

1

1 = Tan

2 = Brown

3 =Black

Pubescence Color:

3

1 = Gray

2 = Brown (Tawny)

3 =Light Tawny

Plant Habit:

3

1 = Determinate

2 = Semi - Determinate

3 =Indeterminate

4 =Intermdeiate

Maturity Group:

06

1 = 000

2 = 00

3 = 0

4 = I

5 = II

 $6 = \mathbf{\Pi}$

7 = IV

8 = V

9 = VI

10 = VII

11 = VIII

12 = IX

13 = X

14 = XI

15 = XII

Maturity Subgroup:

4

Please enter a value from 0 - 9

B. DISEASE REACTION

0 = Not Tested

1 = Susceptible 2 =

2 = Resistant

3 = Tolerant

Bacterial

0

Bacterial Pustule (Xanthomonas campestri pv. glycines (Nakano) Dye)

1

Bacterial Blight Pseudomonas syringa pv. glycinea (Coerper) Young, Dye, and Wilkie)

0

Wildfire Blight Pseudomonas syringa pv. tabaci (Wolf Foster) Young, Dye, Wilkie)

DISF	EASE REACT	ION (Continued	0 = Not Tested	1 = Susceptible	2 = Resistant	3 = Tolerant
unga	ıl					
1	Brown Spot	(Septoria glycines _{Hei}	nmi)			
	Frogeye Leaf	Spot (Cercospora so	ojina Hara)			
0	race 1	0 rac	e 2	0 race 3		0 race 4
0	race 5	0 rac	e 6	0 Othe	(Please Specify) 0	
0	Target Spot (Corynespora cassiico	la (Berk. Curt.) Wei)	<u> </u>	÷	
0	Downey Milde	ew (Peronospora trifo	liorum var. manchurica	(Naum.) Syd. e	x Gäum)	
0	Powdery Mild	ew (<i>Microsphaera d</i> ij	fusa Cke. and Pk.)	·		•
0	Brown Stem R	Rot <i>(Phialophora gre</i>	gata (AllingtonChaml	berlain) W. Gar	ns.)	· .
0	Stem Canker	(Diaporthe phaseolo	rum (Cke. and Ell.) Sac	c. var. <i>caulivora</i>	Athow and Caldwo	ell)
1	Pod and Stem	Blight (Diaporthe p	haseolorum (Cke. and l	Ell.) Sacc. var. <i>s</i>	ojae (Lehman) Weh	m.
0	Purple Seed St	ain (Cercospora k	ikuchii (T. Matsu. and	Tomoyasu) Gar	rdener)	
1	Rhizoctonia Re	oot Rot (Rhizoctoni	a solani Kühn)			
ytop	hthora Root Rot	(Phytophthora mega	ssperma Drechs. f. sp.	<i>glycinea</i> (Kuan	Erwin))	
0	race 1	0 race 8	0 race 15	0	race 22	
0	race 2	0 race 9	0 race 16	0	race 23	
0	race 3	0 race 10	0 race 17	0,	race 24	•
1	race 4	0 race 11	0 race 18	0 ,	race 25	•
0	race 5	0 race 12	0 race 19	<u></u>	race 26	· · · · · ·
0	race 6	0 race 13	0 race20	0	Other (Please Speci	((7))
1	race 7	0 race 14	0 race 21			
1	Bud Blight (To	bacco Ringspot Viru	s)			
1	Yellow Mosaic	(bean Yellow Mosai	c Virus)			

B. D	ISI	EASE REACT	CION	S (Continue	ed) $0 = No$	t Tested	1 = Sus	ceptible	2 = Resistant	3 = Tolerant	
Fur	ngal 1	1	ıic (Co	wpea Chlorotic	: Virus)						
	1	Pod Mottle (B	ean Po	od Mottle Virus	s)						
	1	Seed Mottle (S	Soybea	n Mosaic Virus	s)						٠
Nen	nate	ode	-	•							
Soy	bea	n Cyst Nematod	e (He	terodera glycin	es Ichinohe	e)					
:	1	race 1	0	race 4	0	race 9		•			
	1	race 2	1	race 5	0	race 14					
-	2	race 3	0	race 6	0	Other	(Please	Specify)		•	
()	Lance Nemato	de (E	Ioploaimus coli	<i>umbus</i> Sher	·				٠.	
)	Southern Root	t Knot	Nematode (<i>Me</i>	loidogyne ii	ncognita	(Kofoid a	nd White) Chitwo		
()	Northern Root	Knot	Nematode (<i>Me</i>	loidogyne h	apla Chit	wood)				
C)	Peanut Root K	not No	ematode <i>(Meloi</i>	dogyne are	naria (Ne	al) Chitw	ood)			
0)	Reniform Nem	atode	(Rotylenchus r	eniformus I	Linwood a	and Olive	ra)	•	ţ ·	
C)	Javanese Nema	atode	(Meloidogyne jo	avanica (T	reub) Chi	twood)			·	
0)	Other Nematoo	de (P	lease Specify) 0		-		·			
C. PI	HY	SIOLOGICA	L RE	SPONSES	0 = Not	Tested	1 = Susc	eptible	2 = Resistant	3 = Tolerant	
1		Iron Chlorosis	on Cal	careous Soil			•				
0)	Phosphorus				O Oth	ner (<i>Ple</i>	ase Specij	(y) 0		
0		Boron							· .		
0		Aluminum								•	
0		Salt								•	
0		Drought							•		

D. INSECT REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant	3 = Tolerant	
Fungal				·	•
Mexican Bean Beetle (Epilachna van	rivestis Mulsant)				
O Potato Leaf Hopper (Empoasca faba	e (Harris))				
Other (Please Specify)					
E. HERBICIDE REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resistant		
0 Metribuzin					
O Bentazone	÷	·			
1 Sulfonylurea					
2 Glyphosate			:		
0 Glufosinate					
0 Pendimethalin					-
O Other (Please Specify) 0		·			
F. TRANSGENIC COMPOSITION					
Has the development of the subject variety include the removal of genetic material from the applicat	led the insertion of tion variety?	f genetic material f	rom an organism (other than a soybea	n, òr,
If yes, please complete the following infomation r	equests*. Use add	itional pages if nec	essary.		
1. Please state the vector's name:					
2. Please state the vector components:		·			
3. Please describe the genetic material successful	ly transferred into	the subject variety	7:		
4. Please describe the insertion protocol:				•	
A literature citation(s) explaining the four in "Transgenic Composition" portion of this form. The vector components and insert elements are surple Development, Identification, and Characterization.	This section is full mmarized in Figur	ly addressed in the re 1 and Table 1 on	following publication page 1453. Padge	tion. Specific detail ette, S.R. et al.	ls of
G. RIOCHEMICAL MARKERS					

Please describe any biochemical information here, which you believe will be helpful in further describing the subject variety (e.g. Simple Sequences Repeats, Restriction Fragment Length Polymorphisms, Isozymic Characterization). Use additional pages if

necessary.

H. COMMENTS

Exhibit D. Additional Description of the Variety

Soybean Variety 93M42

In Exhibit C we have identified variety 93M42 as susceptible to bacterial blight, brown spot, pod and stem blight, rhizoctonia root rot, bud blight, yellow mosaic, cowpea mosaic, pod mottle and seed mottle.

This does not mean that variety 93M42 is any worse for these problems than other varieties of similar maturity. Rather, we do not consider 93M42 to be immune to these problems. Therefore, we have chosen to be conservative and have identified the line as "susceptible".

Variety 93M42 is an early Group 3 variety. If Group 3 varieties are divided into tenths, the relative maturity of 93M42 is 3.4.

REPRODUCE LOCALLY. Include form number and edition date on a	all reproductions.	ORM APPROVED - OMB No. 0581-005		
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	The following statements are made in 1974 (5 U.S.C. 552a) and the Paper			
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to det certificate is to be issued (7 U.S.C. 2 confidential until the certificate is issued.	421). The information is held		
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	2. VARIETY NAME		
Pioneer Hi-Bred International, Inc	OR EXPERIMENTAL NUMBER	93M42		
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)		
7300 N.W. 62 nd Avenue P.O. Box 1004 Johnston, IA 50131-1004	515-254-2638	515-253-2478		
	7. PVPO NUMBER 2 0 0 5	00080		
	•	n n n n n		
Does the applicant own all rights to the variety? Mark an "X" in the footnote of the property.	ne appropriate block.	X YES NO		
	·			
9. Is the applicant (individual or company) a U.S. National or a U.S. If no, give name of country	based company?	X YES NO		
•				
10. Is the applicant the original owner?	If no, please answer one of the follows	lowing:		
a. If the original rights to variety were owned by individual(s), is	(are) the original owner(s) a U.S. Nation	al(s)?		
YES NO If no, give name of count	try			
b. If the original rights to variety were owned by a company(ies	s), is (are) the original owner(s) a U.S. ba	sed company?		
YES NO If no, give name of count				
11. Additional explanation on ownership (If needed, use the reverse	•			
11. Additional explanation off ownership (if needed, use the reverse	rior extra spacej.			
Please Note:				
Plant variety protection can only be afforded to the owners (not licer	nsees) who meet the following criteria:	•		
If the rights to the variety are owned by the original breeder, that partional of a country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to nationals of the country which affords similar protection to the country which are considered.				
If the rights to the variety are owned by the company which emplo nationals of a UPOV member country, or owned by nationals of a genus and species.	oyed the original breeder(s), the compan country which affords similar protection	y must be U.S. based, owned by to nationals of the U.S. for the same		
3. If the applicant is an owner who is not the original owner, both the	e original owner and the applicant must n	neet one of the above criteria.		
The original breeder/owner may be the individual or company who d Act for definitions.	lirected the final breeding. See Section	41(a)(2) ot the Plant Variety Protection		
According to the Paperwork Reduction Act of 1995, no persons are required to respond to for this information collection is 0581-0055. The time required to complete this information instructions, searching existing data sources, gathering and maintaining the data needed, a	collection is estimated to average 6 minutes per resp	onse, including the time for reviewing the		
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To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Wasl				
opportunity employer.	hington, D.C. 20250, or call 1-800-245-6340 (voice) of	r (202) 720-1127 (TDD). USDA is an equal		